Claims:

1. A method for inhibiting a pathological condition associated with intercellular adhesion mediated by L-selectin comprising administering to a patient in need a therapeutically effective amount of
   a) an isolated, purified CD34 polypeptide; or
   b) an antibody capable of binding a native CD34.

2. The method of claim 1 wherein the pathological condition is associated with the adhesion of leukocytes to endothelial cells.

3. The method of claim 2 wherein the leukocytes are lymphocytes and the endothelial cells are on peripheral or mesenteric lymph nodes.

4. The method of claim 3 wherein the pathological condition is an autoimmune disease.

5. The method of claim 4 wherein the pathological condition is rheumatoid arthritis, multiple sclerosis, psoriasis, or chronic dermatitis.

6. The method of claim 2 wherein the leukocytes are neutrophils or monocytes, and the endothelial cells are those of venular endothelium.

7. The method of claim 6 wherein the pathological condition treated is acute or chronic inflammation.

8. The method of claim 6 wherein the pathological condition is adult respiratory distress syndrome (ARDS), multi-organ failure, reperfusion injury, acute glomerulonephritis, reactive arthritis, dermatosis, acute purulent meningitis, thermal injury, ulcerative colitis, Crohn's disease, hemodialysis, leukapheresis, hemorrhagic shock, ~~or~~ cytokine-induced toxicity. or rheumatoid arthritis

9. The method of claim 2 further comprising the administration of a therapeutically effective amount of a compound selected from the group consisting of:
   a) a selectin;
   b) a selectin ligand other than a CD34 polypeptide;
   c) an antibody capable of binding a selectin or a selectin ligand other than a CD34 polypeptide;
   d) an integrin;
   e) an integrin ligand;
   f) an antibody capable of binding an integrin or an integrin ligand; and

Subq3

g) a non-protein antagonist of L-selectin-CD34 interaction.

10. The method of claim 9 wherein said compound is a P-selectin, a P-selectin ligand or an antibody capable of binding P-selectin.

11. The method of claim 2 further comprising the administration of a steroidal or non-steroidal antiinflammatory agent.

12. The method of claim 2 wherein said patient is a mammal.

13. The method of claim 12 wherein said patient is human.

14. The method of claim 1 wherein said CD34 polypeptide has a carbohydrate structure recognized by the monoclonal antibody MECA 79.

15. A method for targeting a pharmaceutically active compound to endothelial cells comprising chemically or physically associating said compound with an antibody capable of binding a native CD34.

16. The method of claim 15 wherein said pharmaceutically active compound is an antiinflammatory agent.

17. The method of claim 15 wherein said pharmaceutically active compound is an antioxidant.

18. The method of claim 15 wherein said pharmaceutically active compound is directly fused to a constant domain sequence of said antibody.

19. A method of presenting a carbohydrate antagonist of L-selectin-CD34 interaction to endothelial cells expressing CD34 comprising attaching said antagonist to the polypeptide backbone or a CD34 polypeptide.

20. A bispecific molecule comprising a CD34 sequence or an antibody sequence capable of binding a native CD34 and a further pharmaceutically active moiety.

21. The bispecific molecule of claim 20 comprising an antibody sequence capable of binding a native CD34 and a pharmaceutically active moiety of an antiinflammatory agent or an antioxidant.

22. The bispecific molecule of claim 20 comprising a first antibody sequence capable of binding a native CD34 and a second antibody sequence

capable of binding a different molecule associated with leukocyte adhesion.

23. The bispecific molecule of claim 22 wherein said second antibody sequence is capable of binding a native selectin ligand other than CD34.

24. The bispecific molecule of claim 22 wherein said second antibody sequence is capable of binding a native integrin ligand.

25. The bispecific molecule of claim 24 wherein said integrin ligand is a member of the ICAM family.

26. A pharmaceutical composition comprising an isolated, purified CD34 polypeptide or an anti-CD34 antibody.

27. The pharmaceutical composition of claim 26 further comprising an additional pharmaceutically active compound.

add 27